



6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 2, and 27

[WT Docket No. 19-116, FCC 19-43]

Allocation and Service Rules for the 1675–1680 MHz Band

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the Federal Communications Commission proposes to reallocate the 1675-1680 MHz band for shared use between incumbent federal operations and new, non-federal flexible wireless (fixed or mobile) use operations. The Commission seeks comment on the appropriate sharing mechanisms that will protect incumbent federal operations while making the spectrum available for new, non-federal use. The Commission also proposes service and technical rules designed to promote efficient and intensive use by any new, non-federal services.

DATES: Interested parties may file comments on or before **[INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**; and reply comments on or before **[INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may submit comments, identified by WT Docket No. 19-116, by any of the following methods:

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the Commission's Electronic Comment Filing System (ECFS): <http://fjallfoss.fcc.gov/ecfs2/>. See Electronic Filing of Documents in Rulemaking Proceedings, 63 FR 24121 (1998).
- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. Generally if more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number. Commenters are only required to file copies in GN Docket No. 13-111.

- Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
 - Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).

FOR FURTHER INFORMATION CONTACT: Anna Gentry, Anna.Gentry@fcc.gov, of the Wireless Telecommunications Bureau, Mobility Division, (202) 418-7769. For additional information concerning the PRA information collection requirements contained in this document, contact Cathy Williams at (202) 418-2918 or send an email to PRA@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking (NPRM) in WT Docket No. 19-116, FCC 19-43, released on May 13, 2019. The complete text of the NPRM is available for viewing via the Commission's ECFS website by entering the docket number, WT Docket No. 19-116. The complete text of the NPRM is also available for public inspection and copying from 8 a.m. to 4:30 p.m. Eastern Time (ET) Monday through Thursday or from 8 a.m. to

11:30 a.m. ET on Fridays in the FCC Reference Information Center, 445 12th Street S.W., Room CY-B402, Washington, DC 20554, telephone 202-488-5300, fax 202-488-5563.

This proceeding shall continue to be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s ex parte rules (47 CFR 1.1200 et seq.). Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules.

I. Notice of Proposed Rulemaking

Reallocation of the 1675-1680 MHz Band. Consistent with the allocation of the broader 1675-1690 MHz band in all three ITU Regions of the International Table,¹ the NPRM proposes to reallocate the 1675-1680 MHz band on a co-primary basis for non-federal fixed and mobile (except aeronautical

¹ See 47 CFR 2.106.

mobile) services. Similar to the Commission's allocation of certain other bands, the proposed reallocation of the 1675-1680 MHz band also would permit the band to be auctioned and used for fixed and mobile (except aeronautical mobile) services, thereby providing flexibility for potential users to tailor the use of the band depending on the specific needs of their networks.

The 1675-1680 MHz band is currently used by NOAA for the Meteorological Satellite (MetSat) and Meteorological Aids (MetAids) services. These services provide robust weather data to the National Oceanic and Atmospheric Administration (NOAA) and other users, which they use for forecasting weather, and in part, managing hydrological resources across the country. MetSat services will continue to occupy the band until at least 2036. The NPRM seeks comment on an appropriate sharing mechanism that will allow both federal and non-federal users to operate successfully in the band. Specifically, the NPRM seeks comment on how: (1) current federal earth stations in, and adjacent to, the band could be protected from harmful interference; (2) planned federal earth stations could be added to the band while minimizing disruptions to commercial service; and (3) non-federal earth stations that rely on the data transmitted in the band by NOAA satellites could continue to have access to this data.

A number of non-federal users operate earth stations that receive the signal from the GOES-N and GOES-R series satellites to provide them access to data necessary to carry out their weather forecasting and other activities. The Commission believes that these users should continue to have access to this data, and the NPRM seeks comment on how best to achieve this goal. The NPRM seeks comment on the number and location of such non-federal earth stations, the likelihood of interference at such locations, and ways to mitigate the risk of interference or otherwise ensure that they continue to have access to the data were we to allow non-federal fixed and mobile operations. In this regard, the NPRM notes the Commission also expects that the completed Spectrum Pipeline Act study² will provide

² Title X of the Bipartisan Budget Act of 2015 (Spectrum Pipeline Act) modified previous legislation to provide funds from the Spectrum Relocation Fund for research and development, engineering studies, economic analyses, or other activities that "improve the efficiency and effectiveness of the spectrum use of federal entities in order to make available frequencies ... for reallocation for non-federal use or shared federal and non-federal use, or a combination thereof, and for auction in accordance with such reallocation." See Spectrum Pipeline Act, 129 Stat. 584, Sec. 1005(a)(2) (2015). NOAA is currently conducting a study using Spectrum Relocation Fund support, as provided

additional information on these topics. To the extent that particular users rely on non-federal earth stations for critical public safety, weather forecasting, and emergency response data and are concerned about their ability to continue to receive the data directly from the NOAA satellites if the band is made available for shared operations, the NPRM encourages them to identify their locations and specific data needs, and discuss alternative means to receive such data.

To ensure that data from GOES satellites is made broadly available to the public, the NPRM seeks comment on alternative means of delivering such data to current users and other interested parties. For example, the NPRM seeks comment on whether an Internet-based or private network content delivery system be used to make the GOES data available more broadly, without the need for an earth station, and whether this would be an adequate means of ensuring the data can be accessed reliably. The NPRM seeks comment on the likely costs of shifting to alternative delivery systems and whether such a content delivery system increase the total number of users with reliable access to such data. To the extent that parties believe that an alternative solution would be less reliable than an earth station, the NPRM seeks specific comment on the factors that contribute to the lower reliability for an Internet-based or other terrestrial solution. The NPRM notes that NOAA already makes some MetSat and other weather data services available through other means—e.g., the Internet—and these services vary in bandwidth requirements. The NPRM seeks comment on whether there are examples in this or other bands in which other content delivery solutions have replaced or supplemented earth-station-based receivers, and if so, how such data feeds perform during major weather events. The NPRM also seeks comment on any special protections that may be appropriate to ensure continuity of service for MetSat users.

1675-1680 MHz Band Plan. Given the limited size of this band, the NPRM proposes to auction 1675-1680 MHz licenses on an unpaired basis for terrestrial fixed and mobile use. Further, to avoid incompatible operations among co-channel or adjacent channel licensees, the NPRM proposes that 1675-1680 MHz be used solely as a downlink band. Alternatively, the NPRM seeks comment on whether to

under the Spectrum Pipeline Act, regarding the protection methodology necessary to make the 1675-1680 MHz band available on a shared basis with non-federal fixed or mobile (except aeronautical mobile) users.

authorize this band for a combination of uplink and downlink on a TDD or other basis (as in the adjacent unpaired 1670-1675 MHz band), or for uplink. The NPRM seeks comment on the costs and benefits of such alternate approaches, including the likely use cases each would support. In order to best accommodate the fullest range of mobile wireless services, the NPRM proposes to license the 1675-1680 MHz band as a five-megahertz block and seeks comment on this proposal.

Consistent with the Commission's approach in several other bands used to provide fixed and mobile services, the NPRM proposes to license the 1675-1680 MHz band on a geographic area basis. In determining the appropriate geographic license size, the Commission considers several factors, including: (1) facilitating access to spectrum by both small and large providers; (2) providing for the efficient use of spectrum; (3) encouraging deployment of wireless broadband services to consumers, especially those in rural areas and tribal lands; and (4) promoting investment in and rapid deployment of new technologies and services. In light of these considerations, the NPRM proposes to license the 1675-1680 MHz band on a partial economic area (PEA) basis, which may enable a wide range of bidders to participate in the auction and select the focused geographic areas that are most suited to their planned operations using the 1675-1680 MHz spectrum. The NPRM asks commenters to discuss and quantify the economic, technical, and other public interest considerations of licensing on a PEA basis, or any other recommended licensing approach, given that the band will be shared with federal users.

Licensing and Operating Rules. In order to afford licensees the flexibility to align licenses in the 1675-1680 MHz band with licenses in other spectrum bands governed by Part 27 of the Commission's rules, including the adjacent 1670-1675 MHz band, the NPRM proposes that licensees in the 1675-1680 MHz band comply with licensing and operating rules that are applicable to all Part 27 services, including assignment of licenses by competitive bidding,³ flexible use,⁴ regulatory status,⁵ foreign ownership

³ 47 U.S.C. 309(j); 47 CFR 1.2101-1.2114.

⁴ 47 CFR 2.106, 27.2, 27.3.

⁵ 47 CFR 27.10.

reporting,⁶ compliance with construction notification requirements,⁷ renewal criteria,⁸ permanent discontinuance of operations,⁹ partitioning and disaggregation,¹⁰ and spectrum leasing.¹¹ The NPRM seeks comment on this approach and asks commenters to identify any aspects of the Commission's general Part 27 service rules that should be modified to accommodate the particular characteristics of the 1675-1680 MHz band. In addition, the NPRM seeks comment on service-specific rules for the 1675-1680 MHz band, including eligibility, mobile spectrum holdings policies, license term, performance requirements, renewal term construction obligations, and other licensing and operating rules.

Consistent with established Commission practice, the NPRM proposes to adopt an open eligibility standard for licenses in the 1675-1680 MHz band. Similar to the Commission's approach in the 2017 Spectrum Frontiers Order and FNPRM, the NPRM proposes not to adopt a pre-auction, bright line limit on the ability of any entity to acquire spectrum in the 1675-1680 MHz band through competitive bidding at auction.¹² The NPRM proposes that this band be included in the Commission's spectrum screen, which helps to identify those markets that may warrant further competitive analysis, when evaluating proposed secondary market transactions. In addition, the NPRM proposes to review spectrum holdings on a case-by-case basis when applications for initial licenses are filed post-auction to ensure that the public interest benefits of having a threshold on spectrum applicable to secondary market transactions are not rendered ineffective. The NPRM seeks comment on whether and how the similarity of this spectrum to spectrum currently included in the screen should be factored into the Commission's analysis,

⁶ 47 U.S.C. 310; 47 CFR 27.12.

⁷ 47 CFR 27.14(k).

⁸ *Id.* § 1.949.

⁹ *Id.* § 1.953.

¹⁰ *Id.* § 1.950.

¹¹ *Id.* § 1.9001 *et seq.*

¹² Use of Spectrum Bands Above 24 GHz For Mobile Radio Services et al., GN Docket No. 14-177 *et al.*, Second Report and Order, Second Further Notice of Proposed Rulemaking, Order on Reconsideration, and Memorandum Opinion and Order, 32 FCC Rcd 10988, 11009-11011, paras. 70-74 (2017) (2017 Spectrum Frontiers Order and FNPRM).

including the suitability of 1675-1680 MHz spectrum for use in the provision of mobile telephony/broadband services.

The NPRM proposes a 15-year term for licenses for the 1675-1680 MHz band, and invites commenters to submit alternate proposals for the appropriate license term, which should include a discussion on the costs and benefits. The Commission continues to believe that performance requirements play a critical role in ensuring that licensed spectrum does not lie fallow. Accordingly, considering the unique characteristics of this band, the NPRM proposes that a 1675-1680 MHz band licensee shall provide reliable signal coverage and offer service to at least 45 percent of the population in each of its license areas within 6 years of initial grant (first performance benchmark), and to at least 80 percent of the population in each of its license areas within 12 years of initial grant (second performance benchmark). The NPRM notes that to the extent that sharing in this band is achieved with protection zones, those zones may limit a non-federal fixed or mobile licensee's ability to serve some portion of the population. For purposes of assessing the satisfaction of the buildout requirement, the NPRM seeks comment on how to account for the areas where federal use limits or prohibits 1675-1680 MHz use. The NPRM also seeks comment on alternative methodologies for measuring population coverage requirements in the Gulf of Mexico (e.g. using off-shore platforms as a proxy for population coverage).

Along with performance benchmarks, the Commission seeks to adopt a meaningful and enforceable penalty for failing to meet those benchmarks. The NPRM proposes that, in the event a 1675-1680 MHz licensee fails to meet the first performance benchmark, the licensee's second performance benchmark and license term would be reduced by two years, thereby requiring it to meet the second performance benchmark two years sooner (at 10 years into the license term), and reducing its license term to 13 years. The NPRM further proposes that, in the event a 1675-1680 MHz licensee fails to meet the second performance benchmark of 80 percent population coverage for a particular license area, its authorization for each such license area shall terminate automatically without further Commission action. In the event a licensee's authority to operate terminates, the NPRM proposes that the licensee's spectrum rights would become available for reassignment pursuant to the competitive bidding provisions of section

309(j). Further, consistent with the Commission's rules for other WRS licenses, including AWS-1, AWS-3, AWS-4 and H Block, the NPRM proposes that any 1675-1680 MHz licensee that forfeits its license for failure to meet its performance requirements would be precluded from regaining the license. Finally, the NPRM seeks comment on whether there are other alternative buildout and enforcement mechanisms the Commission should consider, including alternative metrics for licensees that provide services potentially less suited to a population metric, such as Internet of Things type services.

In addition to being subject to procedures applicable to all Part 27 licensees for demonstrating compliance with performance requirements, including the filing of electronic coverage maps and supporting documentation, the NPRM proposes that such electronic coverage maps must accurately depict the boundaries of each license area in the licensee's service territory. If a licensee does not provide reliable signal coverage to an entire license area, the NPRM proposes that its map must accurately depict the boundaries of the area or areas within each license area that are not being served. Further, the NPRM proposes that each licensee also must file supporting documentation regarding the type of service it is providing for each licensed area within its service territory and the type of technology used to provide such service, and certify the accuracy of such documentation. Supporting documentation must include the assumptions used to create the coverage maps, including the propagation model and the signal strength necessary to provide reliable service with the licensee's technology.

In addition to, and independent of, the general renewal requirements contained in § 1.949 of the Commission's rules, which apply to all WRS licenses, the NPRM also seeks comment on application of specific renewal term construction obligations to 1675-1680 MHz licenses. The WRS Renewal Reform FNPRM proposed to apply rules adopted in that proceeding to all flexible geographic licenses.¹³ Given the proposal to license this band on a geographic basis for flexible use, any additional renewal term construction obligations proposed in the WRS Renewal Reform FNPRM also would apply to licenses in the 1675-1680 MHz band. The NPRM seeks comment on whether there are unique characteristics of the

¹³ Amendment of Parts 1, 22, 24, 27, 74, 80, 90, 95, and 101 To Establish Uniform License Renewal et al., WT Docket No. 10-112, Second Report and Order and Further Notice of Proposed Rulemaking and Order, 32 FCC Rcd 8874, 8915, paras. 111-12 (2017) (WRS Renewal Reform 2nd R&O and FNPRM).

1675-1680 MHz band that might require a different approach than the various proposals raised by the WRS Renewal Reform FNPRM.

If the Commission adopts a geographic area licensing scheme that allows submission of mutually exclusive applications for the proposed non-federal use of the 1675-1680 MHz band, it will use a competitive bidding process as required by the Communications Act.¹⁴ As the Commission has done in previous auctions, the NPRM proposes to conduct any auction for 1675-1680 MHz licenses in conformity with the general competitive bidding rules set forth in Part 1, subpart Q, of the Commission's rules.¹⁵ Under this proposal, such rules would be subject to any modifications that the Commission may adopt for its Part 1 general competitive bidding rules in the future. The NPRM seeks comment on general application of the Part 1 competitive bidding rules to any auction of 1675-1680 MHz band licenses and whether any of the Part 1 rules or other competitive bidding policies would be inappropriate or should be modified for an auction of licenses in this band.

The NPRM seeks comment on whether to make bidding credits for designated entities available for this band and how to define a small business if the Commission decides to offer small business bidding credits. In recent years, for other flexible use licenses we have adopted bidding credits for the two larger designated entity business sizes provided in the Commission's Part 1 standardized schedule of bidding credits. For the 1675-1680 MHz band, we seek comment on defining a small business as an entity with average gross revenues for the preceding five years not exceeding \$55 million, and a very small business as an entity with average gross revenues for the preceding five years not exceeding \$20 million.¹⁶ A qualifying "small businesses" would be eligible for a bidding credit of 15 percent and

¹⁴ See 47 U.S.C. 309(j)(1).

¹⁵ See 47 CFR 1.2101-1.2114.

¹⁶ The standardized schedule of bidding credits provided in § 1.2110(f)(2)(i) defines small businesses based on average gross revenues for the preceding three years. In December 2018, Congress revised the standard set out in the Small Business Act for categorizing a business concern as a "small business concern," by changing the annual average gross receipts benchmark from a three-year period to a five-year period. Thus, as a general matter, a Federal agency cannot propose to categorize a business concern as a "small business concern" for Small Business Act purposes unless the size of the concern is based on its annual average gross receipts "over a period of not less than 5 years." 15 U.S.C. 632(a)(2)(C)(ii)(II), *as amended by* Small Business Runway Extension Act of 2018, Pub. L. 115-324 (Dec. 17, 2018). We therefore propose to adopt the Small Business Act's revised five-year average

qualifying “very small businesses” would be eligible for a bidding credit of 25 percent. The NPRM also seeks comment on whether to offer rural service providers a designated entity bidding credit for licenses in this band.¹⁷

Technical Rules. The NPRM proposes to allow fixed and base station (downlink) operations in the 1675-1680 MHz band and to apply technical standards similar to those in other AWS bands. The NPRM also considers the technical rules governing the adjacent 1670-1675 MHz band and seeks comment on how the two bands can best coexist either separately, or in combination. The NPRM seeks to establish technical rules that will help optimize the potential uses of spectrum, while minimizing the impact on other users in the band or adjacent bands, consistent with the public interest.

The NPRM proposes to allow fixed and base stations to operate up to 2000 watts peak equivalent isotropically radiated power (EIRP), consistent with the limits established for similar services governed by Part 27 of the Commission’s rules. The NPRM proposes an out-of-band emissions (OOBE) limit for fixed and base stations of $43 + 10 \log_{10}(P)$ dB, where P is the transmit power in watts. The NPRM proposes to limit a licensee’s predicted or measured field strength to 47 dB μ V/m (or less) at any location along the border of its license area. The NPRM does not propose to limit the height of antennas for either fixed or base stations. Consistent with existing rules for AWS operations, the NPRM proposes that operations in the 1675-1680 MHz band would be subject to international agreements with Mexico and Canada. Finally, Part 27 contains several additional technical rules applicable to all Part 27 services, including Section 27.51 (Equipment authorization), Section 27.52 (RF safety), Section 27.54 (Frequency stability), and Section 27.56 (Antennas structures; air navigation safety).¹⁸ The NPRM proposes that all

gross receipts benchmark for purposes of determining which entities qualify for small business bidding credits. But because the SBA has not yet revised its regulations to update the definition of “small business concern,” for purposes of compliance with the Regulatory Flexibility Act, the Commission will continue to use the SBA’s current definitions of “small business,” which is based on a three-year benchmark. *See infra* Appendix C.

¹⁷ 47 CFR 1.2110(f)(4)(i) (bidding credit of 15 percent for applicants meeting the requirements for being designated as a rural service provider). To be eligible to receive a rural service provider bidding credit, an applicant must meet the requirements set forth in Part 1. An applicant eligible for both small business bidding credits and rural service provider bidding credits may only receive one of the two credits. *Id.* § 1.2110(f)(2)(i), (4)(i).

¹⁸ 47 CFR 27.51, 27.52, 27.54, 27.56.

of these Part 27 technical rules should apply to all 1675-1680 MHz band licenses and licensees, including licensees who acquire their licenses through partitioning or disaggregation.

II. PROCEDURAL MATTERS

Initial Regulatory Flexibility Act Analysis

As required by the Regulatory Flexibility Act of 1980 (RFA), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules proposed in this document. We request written public comment on the IRFA. Comments must be filed in accordance with the same deadlines as comments filed in response to the NPRM as set forth on the first page of this document, and have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

Initial Paperwork Reduction Act Analysis

The NPRM contains proposed new information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and OMB to comment on the information collection requirements contained in this document, as required by PRA. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

List of Subjects in 47 CFR Part 1, 2, and 27

Communications common carriers, Radio, Reporting and recordkeeping requirements
FEDERAL COMMUNICATIONS COMMISSION.

Marlene Dortch,
Secretary.

Proposed Rules

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR parts 1, 2, and 27 as follows:

PART 1 – PRACTICE AND PROCEDURE

1. The authority citation for part 1 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154(i), 154(j), 155, 157, 225, 227, 303(r), 309, 1403, 1404, 1451, and 1452.

2. Amend § 1.907 by revising the definition of “Covered Geographic Licenses” to read as follows:

§ 1.907 Definitions.

* * * * *

Covered Geographic Licenses. Covered geographic licenses consist of the following services: 1.4 GHz Service (part 27, subpart I); 1.6 GHz Service (part 27, subpart J); 24 GHz Service and Digital Electronic Message Services (part 101, subpart G); 218-219 MHz Service (part 95, subpart F); 220-222 MHz Service, excluding public safety licenses (part 90, subpart T); 600 MHz Service (part 27, subpart N); 700 MHz Commercial Services (part 27, subpart F and H); 700 MHz Guard Band Service (part 27, subpart G); 800 MHz Specialized Mobile Radio Service (part 90, subpart S); 900 MHz Specialized Mobile Radio Service (part 90, subpart S); 1675-1680 MHz Service (part 27, subpart O); Advanced Wireless Services (part 27, subparts K and L); Air-Ground Radiotelephone Service (Commercial Aviation) (part 22, subpart G); Broadband Personal Communications Service (part 24, subpart E); Broadband Radio Service (part 27, subpart M); Cellular Radiotelephone Service (part 22, subpart H); Citizens Broadband Radio Service (part 96, subpart C); Dedicated Short Range Communications Service, excluding public safety licenses (part 90, subpart M); H Block Service (part 27, subpart K); Local Multipoint Distribution Service (part 101, subpart L); Multichannel Video Distribution and Data Service (part 101, subpart P); Multilateration Location and Monitoring Service (part 90, subpart M); Multiple Address Systems (EAs) (part 101, subpart O); Narrowband Personal Communications Service (part 24, subpart D); Paging and Radiotelephone Service (part 22, subpart E; part 90, subpart P); VHF Public Coast

Stations, including Automated Maritime Telecommunications Systems (part 80, subpart J); Upper Microwave Flexible Use Service (part 30); and Wireless Communications Service (part 27, subpart D).

* * * * *

3. Section 1.9005 is amended by revising paragraph (n) to read as follows:

§ 1.9005 Included services.

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(n) The Wireless Communications Service in the 1670-1675 MHz band and 1675-1680 MHz band (part 27 of this chapter);

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PART 2 – FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS; GENERAL RULES AND REGULATIONS

4. The authority citation for part 2 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 302a, 303, and 336, unless otherwise noted.

5. Section 2.106, the Table of Frequency Allocations, is amended by revising pages 35, 36, 37, and 38 to read as follows:

§ 2.106 Table of Frequency Allocations.

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International Table						United States Table						FCC Rule Part(s)
Region 1 Table		Region 2 Table		Region 3 Table		Federal Table			Non-Federal Table			
1626.5-1660 MOBILE-SATELLITE (Earth-to-space) 5.351A 5.341 5.351 5.353A 5.354 5.355 5.357A 5.359 5.362A 5.374 5.375 5.376						1626.5-1660 MOBILE-SATELLITE (Earth-to-space) US308 US309 US315 US380 5.341 5.351 5.375						Satellite Communications (25) Maritime (80) Aviation (87)
1660-1660.5 MOBILE-SATELLITE (Earth-to-space) 5.351A RADIO ASTRONOMY 5.149 5.341 5.351 5.354 5.362A 5.376A						1660-1660.5 MOBILE-SATELLITE (Earth-to-space) US308 US309 US380 RADIO ASTRONOMY 5.341 5.351 US342						Satellite Communications (25) Aviation (87)
1660.5-1668 RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379 5.379A						1660.5-1668.4 RADIO ASTRONOMY US74 SPACE RESEARCH (passive) 5.341 US246						
1668-1668.4 MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY SPACE RESEARCH (passive) Fixed Mobile except aeronautical mobile 5.149 5.341 5.379 5.379A												
1668.4-1670 METEOROLOGICAL AIDS FIXED MOBILE except aeronautical mobile MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.379C RADIO ASTRONOMY 5.149 5.341 5.379D 5.379E						1668.4-1670 METEOROLOGICAL AIDS (radiosonde) RADIO ASTRONOMY US74 5.341 US99 US342						
1670-1675 METEOROLOGICAL AIDS FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE MOBILE-SATELLITE (Earth-to-space) 5.351A 5.379B 5.341 5.379D 5.379E 5.380A						1670-1675 5.341 US211 US362			1670-1675 FIXED MOBILE except aeronautical mobile 5.341 US211 US362			Wireless Communications (27)
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5.341			1680-1695 METEOROLOGICAL AIDS (radiosonde) METEOROLOGICAL-SATELLITE (space-to-Earth) US88			
1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) Fixed Mobile except aeronautical mobile 5.289 5.341 5.382			1690-1700 METEOROLOGICAL AIDS METEOROLOGICAL-SATELLITE (space-to-Earth) 5.289 5.341 5.381		5.341 US211 US289 1695-1710 METEOROLOGICAL-SATELLITE (space-to-Earth) US88 1695-1710 FIXED MOBILE except aeronautical mobile 5.341 US88	Wireless Communications (27)
1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.289 5.341		1700-1710 FIXED METEOROLOGICAL-SATELLITE (space-to-Earth) MOBILE except aeronautical mobile 5.289 5.341 5.384				
1710-1930 FIXED MOBILE 5.384A 5.388A 5.388B 5.149 5.341 5.385 5.386 5.387 5.388			1710-1761 5.341 US91 US378 US385 1761-1780 SPACE OPERATION (Earth-to-space) G42 US91 1780-1850 FIXED MOBILE SPACE OPERATION (Earth-to-space) G42 1850-2025			
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MOBILE-SATELLITE (Earth-to-space) 5.351A				
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		2450-2483.5 FIXED MOBILE RADIOLOCATION 5.150	2450-2483.5 FIXED MOBILE Radiolocation 5.150 US41	ISM Equipment (18) TV Auxiliary Broadcasting (74F) Private Land Mobile (90) Fixed Microwave (101)

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

6. The authority citation for part 27 continues to read as follows:

AUTHORITY: 47 U.S.C. 154, 301, 302a, 303, 307, 309, 332, 336, 337, 1403, 1404, 1451, and 1452, unless otherwise noted.

7. Section 27.1 is amended by adding paragraph (b)(15) to read as follows:

§ 27.1 Basis and purpose.

* * * * *

(b) * * *

(15) 1675-1680 MHz.

* * * * *

8. Section 27.5 is amended by adding paragraph (m) to read as follows:

§ 27.5 Frequencies.

* * * * *

(m) 1675-1680 MHz band. The unpaired 1675-1680 MHz band is available for assignment on a PEA basis.

9. Section 27.6 is amended by adding paragraph (m) to read as follows:

§ 27.6 Service areas.

* * * * *

(m) 1675-1680 MHz band. The service area for the 1675-1680 MHz band is based on PEAs as defined in paragraph (l) of this section.

10. Section 27.13 is amended by adding paragraph (m) to read as follows:

§ 27.13 License period.

* * * * *

(m) 1675-1680 MHz band. Authorizations for the 1675-1680 MHz band will have a term not to exceed 15 years from the date of issuance or renewal.

11. Section 27.14 is amended by revising the first sentence of paragraph (a) and the first

sentence of paragraph (k) and adding paragraph (u) to read as follows:

§ 27.14 Construction requirements.

(a) AWS and WCS licensees, with the exception of WCS licensees holding authorizations for the 600 MHz band, Block A in the 698-704 MHz and 728-734 MHz bands, Block B in the 704-710 MHz and 734-740 MHz bands, Block E in the 722-728 MHz band, Block C, C1 or C2 in the 746-757 MHz and 776-787 MHz bands, 1675-1680 MHz band, Block A in the 2305-2310 MHz and 2350-2355 MHz bands, Block B in the 2310-2315 MHz and 2355-2360 MHz bands, Block C in the 2315-2320 MHz band, and Block D in the 2345-2350 MHz band, and with the exception of licensees holding AWS authorizations in the 1915-1920 MHz and 1995-2000 MHz bands, the 2000-2020 MHz and 2180-2200 MHz bands, or 1695-1710 MHz, 1755-1780 MHz and 2155-2180 MHz bands, must, as a performance requirement, make a showing of “substantial service” in their license area within the prescribed license term set forth in §27.13. * * *

* * * * *

(k) Licensees holding WCS or AWS authorizations in the spectrum blocks enumerated in paragraphs (g), (h), (i), (q), (r), (s), (t), and (u) of this section, including any licensee that obtained its license pursuant to the procedures set forth in paragraph (j) of this section, shall demonstrate compliance with performance requirements by filing a construction notification with the Commission, within 15 days of the expiration of the applicable benchmark, in accordance with the provisions set forth in §1.946(d) of this chapter. ***

* * * * *

(u) The following provisions apply to any licensee holding an authorization in the 1675-1680 MHz band:

(1) A licensee shall provide reliable signal coverage and offer service within six (6) years from the date of the initial license to at least forty-five (45) percent of the population in each of its license areas (“First Buildout Requirement”).

(2) A licensee shall provide reliable signal coverage and offer service within twelve (12) years from the date of the initial license to at least eighty (80) percent of the population in each of its license areas ("Final Buildout Requirement").

(3) If a licensee fails to establish that it meets the First Buildout Requirement for a particular license area, the licensee's Final Buildout Requirement deadline and license term will be reduced by two years.

(4) If a licensee fails to establish that it meets the Final Buildout Requirement for a particular license area, its authorization for each license area in which it fails to meet the Final Buildout Requirement shall terminate automatically without Commission action, and the licensee will be ineligible to regain it if the Commission makes the license available at a later date.

(5) To demonstrate compliance with these performance requirements, licensees shall use the most recently available decennial U.S. Census Data at the time of measurement and shall base their measurements of population served on areas no larger than the Census Tract level. The population within a specific Census Tract (or other acceptable identifier) will be deemed served by the licensee only if it provides reliable signal coverage to and offers service within the specific Census Tract (or other acceptable identifier). To the extent the Census Tract (or other acceptable identifier) extends beyond the boundaries of a license area, a licensee with authorizations for such areas may include only the population within the Census Tract (or other acceptable identifier) towards meeting the performance requirement of a single, individual license. For the Gulf of Mexico license area, the licensee shall demonstrate compliance with these performance requirements, using off-shore platforms, including production, manifold, compression, pumping and valving platforms as a proxy for population in the Gulf of Mexico.

(6) An applicant for renewal of a license covered by this paragraph (u) must make a renewal showing, independent of its performance requirements, consistent with section 1.949 as a condition of each renewal.

12. Section 27.50 is amended by adding paragraph (j) to read as follows:

§ 27.50 Power limits and duty cycle.

* * * * *

(j) In the 1675-1680 MHz band, fixed and base stations are limited to 2000 watts EIRP peak power.

* * * * *

13. Section 27.53 is amended by revising paragraph (k) to read as follows:

§ 27.53 Emission limits.

* * * * *

(k)(1) For operations in the 1670-1675 MHz and 1675-1680 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) by at least $43 + 10 \log (P)$ dB. Compliance with these provisions is based on the procedures described in paragraph (a)(5) of this section.

(2) For operations in the 1670-1675 MHz and 1675-1680 MHz bands, to the extent a licensee establishes unified operations across the AWS blocks, that licensee may choose not to observe the emission limit specified in paragraph (k)(1) of this section, strictly between its adjacent block licenses in a geographic area, so long as it complies with other Commission rules and is not adversely affecting the operations of other parties by virtue of exceeding the emission limit.

(3) Private Agreements. Licensees in the 1670-1675 MHz and 1675-1680 MHz bands may enter into a private agreement with all affected licensees operating in either band to allow the out-of-band emission limit described in this paragraph to be exceeded only between the 1670-1675 MHz and 1675-1680 MHz blocks. A licensee who is a party to a private agreement described in this section (3) must maintain a copy of the agreement in its station files and disclose it, upon request, to prospective AWS assignees, transferees, or spectrum lessees and to the Commission.

* * * * *

14. Section 27.55 is amended by revising paragraph (a)(1) to read as follows:

§ 27.55 Power strength limits.

(a) * * *

(1) 1675-1680, 1995-2000, 2110-2155, 2155-2180, 2180-2200, 2305-2320, and 2345-2360 MHz
bands: 47 dBμV/m.

* * * * *

15. Section 27.57 is amended by revising paragraph (c) to read as follows:

§ 27.57 International coordination.

* * * * *

(c) Operation in the 1675-1680 MHz, 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 MHz bands is subject to international agreements with Mexico and Canada.

16. Subpart O, consisting of §§ 27.1400, 27.1401, and 27.1410, is added to read as follows:

Subpart O—1675-1680 MHz Band

Sec.

27.1400 1675-1680 MHz band subject to competitive bidding.
27.1401 Designated entities in the 1675-1680 MHz band.
27.1410 Protection of Federal Government meteorological-satellite operations.

§ 27.1400 1675-1680 MHz band subject to competitive bidding.

Mutually exclusive initial applications for 1675–1680 MHz band licenses are subject to competitive bidding. The general competitive bidding procedures set forth in 47 CFR part 1, subpart Q of this chapter will apply unless otherwise provided in this subpart.

§ 27.1401 Designated entities in the 1675-1680 MHz band.

(a) Eligibility for small business provisions—(1) Definitions—(i) Small business. A small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding \$55 million for the preceding five (5) years.

(ii) Very small business. A very small business is an entity that, together with its affiliates, its controlling interests, and the affiliates of its controlling interests, has average gross revenues not exceeding \$20 million for the preceding five (5) years.

(2) Bidding credits. A winning bidder that qualifies as a small business, as defined in this section,

or a consortium of small businesses may use the bidding credit of 15 percent, as specified in § 1.2110(f)(2)(i)(C) of this chapter. A winning bidder that qualifies as a very small business, as defined in this section, or a consortium of very small businesses may use the bidding credit of 25 percent, as specified in § 1.2110(f)(2)(i)(B) of this chapter.

(b) Eligibility for rural service provider bidding credit. A rural service provider, as defined in § 1.2110(f)(4)(i) of this chapter, that has not claimed a small business bidding credit may use the bidding credit of 15 percent specified in § 1.2110(f)(4) of this chapter.

§ 27.1410 Protection of Federal Government Meteorological-Satellite operations.

(a) 14 Protection Zones. Within 14 Protection Zones, prior to operating a base station in the 1675-1680 MHz band, licensees must successfully coordinate such base station operations with Federal Government entities operating meteorological satellite Earth-station receivers in the 1675-1710 MHz band.

(b) Additional Protection Zones. Federal earth stations in the 1675-1680 MHz band may be added subject to approval by NTIA and in compliance with a coordination process that will be announced jointly by the FCC and NTIA via Public Notice.

(c) Interference. If protected Federal earth stations receive harmful interference from 1675-1680 MHz band operations in the 1675-1680 MHz band, a 1675-1680 MHz band licensee must, upon notification, modify its operations and/or technical parameters as necessary to eliminate the interference.

(d) Point of contact. 1675-1680 MHz band licensees must provide and maintain a point of contact at all times so that immediate contact can be made should interference against protected Federal sites occur.

(e) Coordination procedures. Federal use of the radio spectrum is generally governed by the National Telecommunications and Information Administration (NTIA) while non-Federal use is governed by the Commission. As such, any guidance or details concerning Federal/non-Federal coordination must be issued jointly by NTIA and the Commission. The Commission may jointly issue with NTIA one or

more public notices with guidance or details concerning the coordination procedures for the 1675-1680 MHz band.

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